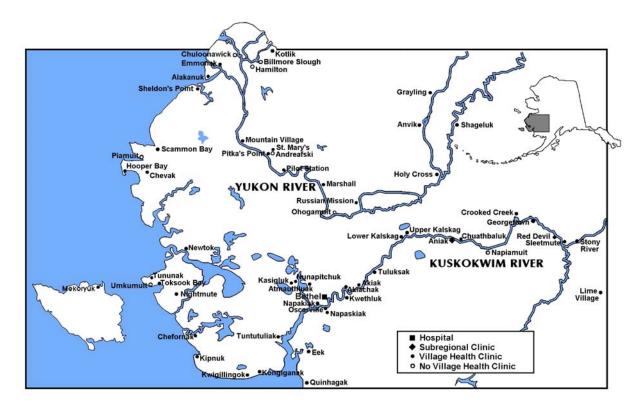
### **OVERVIEW**

### Alaska Native 2003 User Population.

23,108
1,387
631
13,775
2,473
4,842

Users are defined as beneficiaries who used a facility that reports through the Indian Health Service data system at least once between 10/1/2000 and 9/30/2003.

Environmental Factors. The Yukon-Kuskokwim Delta (Y-K-D) is located in Southwestern Alaska, approximately 400 air miles from Anchorage. It encompasses 75,289 square miles of coastal wetlands, tundra, and mountains. The service area consists of 50 Eskimo and Indian villages along the Yukon and Kuskokwim River and their tributaries. On the Yukon, the Y-K-D begins at the village of Grayling and follows the River to Kotlik where it empties into the Bering Sea. The Kuskokwim River boundary begins at the community of McGrath and follows the River down the coast to Quinhagak. This large river system includes most Bering Sea coastal villages, as well as the communities on Nunivak and Nelson islands.



The sub-arctic climate of the Y-K-D hosts short, cool summers and long, cold winters, which are affected by both the continental and transitional climatic zones. The continental zone is characteristic of warm summers and very cold, dry winters and includes the interior villages, depicting the largest land mass within the Y-K-D. The transitional zone encompasses the coastal communities and exhibits generally milder temperatures than the interior with comparable precipitation levels (approximately 20 inches per year). High average wind speeds are present in both zones creating snowdrift barriers for ground transportation and high wind chill factors on cold days.

**Utilities.** Electricity, water, sewer, and solid waste collection are available in most of Bethel. Those communities that do not have water and sewer facilities have honey buckets. All surrounding villages have electricity, but few have adequate water, sewer, and solid waste facilities. Lack of water and sanitation infrastructure is a major public health and community development problem encountered throughout the Y-K-D.

## Yukon Kuskokwim Service Unit Number of Homes With and Without Complete Water and Sewer Service <sup>1</sup>

	# Homes With	# Homes Without	Total # of Homes <sup>2</sup>
YUKON KUSKOKWIM SERVICE UNIT	3,265	2,248	5,513
Yukon Kuskokwim Health Corporation	3,265	2,248	5,513

<sup>&</sup>lt;sup>1</sup>Complete service means operable plumbed indoor water and sewer service. Information applies only to year-round primary homes, including individual homes, duplexes and apartment units. Data from FY 2002.

**Transportation.** The geography and the climate of the Y-K-D region causes severe transportation limitations. There are no existing road systems linking the 50 villages within the Yukon-Kuskokwim Health Corporation (YKHC) service area with the exception of a gravel road between St. Mary's, Pitka's Point and Mt. Village. The Kuskokwim and Yukon River systems and a network of lakes provide linkage between the villages by boat in summer and by snowmachine and truck/car or all terrain vehicle along the Rivers and their tributaries after freeze up. Many villages are more than 100 miles from the hospital. Village patients mostly come in by air taxi, or, in emergencies, by air ambulance (medivac).

**Housing.** There is a critical shortage of housing for hospital staff. Bethel is situated two hours travel time by air to the nearest community that can provide health care or housing opportunities. Rotating service area personnel have no incentive to purchase housing in Bethel, since there is no re-sale market, the housing is poorly constructed, and in many instances fails to meet basic building codes. Water and sewage are handled via holding/storage tanks or in many cases sanitary waste is handled utilizing the "honey bucket" system. Rental units are rare. Prices are extremely high and waiting lists are long. Frequently, there are no available rentals.

<sup>&</sup>lt;sup>2</sup>Excludes homes covered by urban local government water and sewer service. Source: Alaska Area Native Health Service Office of Environmental Health.

Education. In the YKHC service area, K-12 education is provided by the Lower Kuskokwim, Lower Yukon, Kuspuk, Ididarod, Kashanamiut and Yup'iit School Districts. The Lower Kuskokwim School District headquartered in Bethel, Alaska, is the sixth largest school district in Alaska.

#### Natural Resources. The

YKHC service area's population is in transition from

## Yukon Kuskokwim Delta Service Unit Education Status for the Population 25 Years and Over

	Males	Females
White Alone population:		
High School graduate (includes equivalency)	228	61
Bachelors degree or higher	442	433
Al/AN* Alone population:		
High School graduate (includes equivalency)	3,547	1,820
Bachelors degree or higher	120	230

\*AI/AN=American Indian/Alaska Native Source: U.S. Census Bureau, 2000 Census Summary File 3.

a traditional subsistence-based lifestyle to a blended subsistence and cash economy. This fundamental change is occurring rapidly and affects every facet of life in the Y-K-D region including the growth of communities, population patterns, the environment, education, communications, transportation, and employment.

Both the Yup'ik and Athabascan cultures are centered upon subsistence activities. Traditional values continue to stem from the relationship that the people have with the land and traditionally utilized resources. Native spirituality is rooted in the understanding and knowledge of how the people can maintain proper balance within their environment through efficient utilization of their resources (i.e., fish, game, birds and plants). Property is largely related to the successful quest for and management of traditional natural resources. Traditional education emphasized the development of a personal awareness of the cycle of nature, having a reverence for subsistence resources and encouraged the widest possible distribution of resources for community benefit. These values bonded the social network of the community, strengthening cultural philosophies that promoted healthy family and kinship systems, and encouraged the sharing of food, working together and celebration of life.

Traditional values are so important that a museum in the early 1990s was constructed in Bethel, called the "Yupiit Piciryarait" (the ways of the Yup'ik peoples) Cultural Center to help preserve the traditions and lifestyles of the local indigenous peoples in the Y-K D region.

Health and social service studies have commonly recognized that the continued high levels of alcoholism, suicide, and domestic violence are related directly to the rapid pace of social change within communities. Even though the American Indian, Eskimo, and Aleut population comprise only 15.58% of the general population in Alaska, the State Division of Alcoholism and Drug Abuse reported that of their 7,998 non-duplicated clients, 46% were Alaska Native. Because of Western contact (50 to 75 years ago for the Y-K D region villages), contemporary values have been thrust upon the villages through western education, religion and government systems which conflict directly with traditional values and practices. Forced changes in lifestyle, economics, eating habits or food sources, family/gender roles and responsibilities have resulted in high stress levels. Stress associated with recent acculturation has contributed significantly to the overall poor health status of Alaska Native peoples.

**Employed** 

### **Employment.** The

socioeconomic status for this region is also lower relative to the rest of Alaska.

**Tribes.** Listed below are the federally recognized tribes in the Yukon-Kuskokwim area.

### Yukon-Kuskokwim Health **Corporation Region**

Akiachak Native Community, IRA,

P.L.93-638, Title I - P.O. Box 70, Akiachak, AK 99551

Akiak Native Community IRA - P.O. Box 52165, Akiak, AK 99552

Village of Alakanuk - P.O. Box 167, Alakanuk, AK 99554

Algaaciq Native Village (aka St. Mary's) - P.O. Box 48, St. Mary's, AK 99658

Yupiit of Andreafski - P.O. Box 368, St. Mary's, AK 99658

Village of Aniak - P.O. Box 176, Aniak, AK 99557

Anvik Village - General Delivery, Anvik, AK 99558

Village of Atmautluak - P.O. Box ATT, Atmautluak, AK 99559

Village of Bill Moore's Slough - P.O. Box 20037, Kotlik, AK 99620

Village of Chefornak - P.O. Box 29, Chefornak, AK 99561

Chevak Native Village - P.O. Box 5514, Chevak, AK 99563

Native Village of Chuathbaluk - P.O. Box 31, Chuathbaluk, AK 99557

Chuloonawick Native Village - General Delivery, Chuloonawick, AK 99581

Native Village of Crooked Creek - P.O. Box 69, Crooked Creek, AK 99575

Native Village of Eek - P.O. Box 87, Eek, AK 99578

Emmonak Village - P.O. Box 126, Emmonak, AK 99581

Native Village of Georgetown - General Delivery, Bethel, AK 99559

Organized Village of Grayling IRA (aka Holikachuk) - General Delivery, Grayling, AK 99590

Native Village of Hamilton - P.O. Box 20130, Kotlik, AK 99620

Holy Cross Village - P.O. Box 203, Holy Cross, AK 99602

Native Village of Hooper Bay - P.O. Box 2193, Hooper Bay, AK 99604

Village of Kalskag - General Delivery, Kalskag, AK 99607

Native Village of Kasigluk - P.O. Box 19, Kasigluk, AK 99609

Native Village of Kipnuk - P.O. Box 57, Kipnuk, AK 99614

Native Village of Kongiganak - P.O. Box 5069, Kongiganak, AK 99559

Village of Kotlik - P.O. Box 20096, Kotlik, AK 99620

Organized Village of Kwethluk IRA - P.O. Box 84, Kwethluk, AK 99621

Native Village of Kwigillingok IRA - P.O. Box 49, Kwigillingok, AK 99622

Native Village of Kwinhagak IRA, P.L. 93-638 Title I (Quinhagak) - General Delivery, Quinhagak, AK 99655

Lime Village - General Delivery, Lime Village, AK 99627

Village of Lower Kalskag - P.O. Box 27, Kalskag, AK 99626

Native Village of Marshall (aka Fortuna Ledge) - P.O. Box 10, Fortuna Ledge, AK 99585

Native Village of Mekoryuk IRA - P.O. Box 66, Mekoryuk, AK 99630

Native Village of Mountain Village - P.O. Box 32249, Mountain Village, AK 99632

for the Population 16 Years and Over Males Females White Alone population: 995 701 In labor force

928

678

Yukon Kuskokwim Delta Service Unit

**Employment Status** 

Unemployed 57 23 Al/AN\* Alone population: 3,468 3,209 In labor force Employed 2,541 2,731 Unemployed 908 478

\*Al/AN=American Indian/Alaska Native Source: U.S. Census Bureau, 2000 Census Summary File 3.

Native Village of Napaimute - P.O. Box 96, Aniak, AK 99557

Native Village of Napakiak IRA - General Delivery, Napakiak, AK 99634

Native Village of Napaskiak - P.O. Box 6109, Napaskiak, AK 99559

Newtok Village - P.O. Box WWT, Newtok, AK 99559

Native Village of Nightmute - General Delivery, Nightmute, AK 99690

Native Village of Nunapitchuk IRA - P.O. Box 130, Nunapitchuk, AK 99641

Village of Ohogamiut - General Delivery, Fortuna Ledge, AK 99585

Orutsararmuit Native Council (aka Bethel) - 835 Ridgecrest Dr. P.O. Box 927, Bethel, AK 99559

Oscarville Traditional Council - P.O. Box 1554, Oscarville, AK 99559

Native Village of Paimiut - General Delivery, Hooper Bay, AK 99604

Pilot Station Traditional Village - P.O. Box 5040, Pilot Station, AK 99650

Native Village of Pitka's Point - P.O. Box 127, St. Mary's, AK 99658

Village of Red Devil - P.O. Box 49, Red Devil, AK 99656

Native Village of Russian Mission - P.O. Box 9, Russian Mission, AK 99657

Native Village of Scammon Bay - P.O. Box 126, Scammon Bay, AK 99662

Shageluk Native Village IRA - General Delivery, Shageluk, AK 99665

Native Village of Sheldon's Point - General Delivery, Nunam Iqua (Sheldon's Point), AK 99666

Village of Sleetmute - P.O. Box 21, Sleetmute, AK 99688

Village of Stony River - P.O. Box SRV, Stony River, AK 99557

Native Village of Toksook Bay - Neslon Island, Toksook Bay, AK 99637

Tuluksak Native Community IRA - P.O. Box 156, Tuluksak, AK 99679

Native Village of Tuntutuliak -P.O. Box 77, Tuntutuliak, AK 99680

Native Village of Tununak IRA - P.O. Box 77, Tununak, AK 99681

Umkumiute Native Village - General Delivery, Nightmute, AK 99690

#### DESCRIPTION OF HEALTH-CARE DELIVERY SYSTEM

The Yukon Kuskokwim Health Corporation (YKHC) headquarters is located in Bethel, 60 miles from the mouth of the Kuskokwim River. Bethel serves as the commercial center for the Y-K D region and supports daily one hour flights to Anchorage. Two Y-K-D villages with sub-regional clinics, Aniak and St. Mary's, also have regularly scheduled commercial flights to Anchorage. Aniak serves as the upper port for ocean-going vessels on the Kuskokwim River during the summer.

Health care services for Y-K D residents are provided following a "Four Tier Model" which incorporates primary care services by: 1) Clinics, 2) Sub-Regional Clinics, 3) Yukon-Kuskokwim Delta Regional Hospital, and 4) Alaska Native Medical Center. The Four Tier Model is used to assure a continuum of quality care for patients needing advanced medical services.

Health care in the Y-K D is also provided through a variety of different organizations including YKHC, State of Alaska Public Health Nursing, Bethel Community Services, Infant Learning Program, Yukon-Kuskokwim Correctional Center clinic, and Bethel Family Clinic.

Yukon-Kuskokwim Health Corporation (YKHC) is a private, non-profit 501 (c) (3) health organization that delivers primary care, educational, preventive, and planning services to the people of the Yukon-Kuskokwim Delta. Funding for YKHC is primarily provided through the Indian Health Service (IHS) via the Alaska Area Native Health Service and the State of Alaska.

Organized in 1969 as part of the Office of Economic Opportunity's effort to develop consumer controlled health organizations, YKHC started with four programs. Over the years, the organization has greatly expanded its staff, budget and provision of health services. On October 1, 1991, operation of the Yukon-Kuskokwim Delta Regional Hospital was transferred from the IHS to the YKHC.

Now, more than 30 primary care, educational, preventive and planning programs are provided by YKHC to over 18,000 persons, most of whom are Yup'ik Eskimos. Initially, YKHC operated as a federally-designated contractor under P.L. 93-638, Title I of the Indian Self-Determination and Education Assistance Act of 1975. In January 1995, under the Self-Governance Demonstration Project, YKHC began to provide its health delivery services through a P.L. 93-638, Title III funding agreement, and joined the Alaska Tribal Health Compact, an all-Alaska Tribal self-governance agreement with the IHS. Tribes in the Alaska Tribal Health Compact, including YKHC, are now operating under P.L. 93-638, Title V funding agreements. The YKHC receives some funding from the State of Alaska.

The community health aide/practitioners in the villages of Akiachak and Quinhagak are managed by their respective local Tribes under a P.L. 93-638, Title I contract with the Indian Health Service.

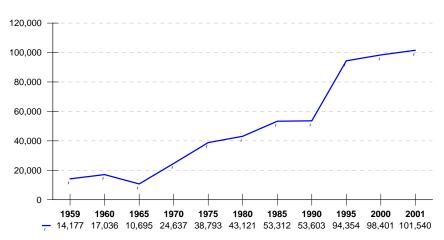
The Y-K-D service area is divided into 11 representative units for YKHC's purpose. YKHC serves 58 federally recognized Tribes, acknowledged through continuing tribal resolutions for provision of primary health care services on their behalf under the Alaska Tribal Health Compact.

Names/Addresses of Current Y-K-D Facilities, Excluding Village Clinics: Yukon Kuskokwim Delta Regional Hospital, P.O. Box 287, Bethel, Alaska 99559 Aniak Sub-Regional Clinic, P.O. Box 269, Aniak, Alaska 99557 Emmonak Sub-Regional Clinic, General Delivery, Emmonak, Alaska 99581 St. Mary's Sub-Regional Clinic, General Delivery, St. Mary's Alaska 99658

The **Yukon-Kuskokwim Delta Regional Hospital (YKDRH)** is a 50-bed general acute care medical facility located in Bethel, Alaska. It consists of a single-story steel frame structure encompassing 100,000 square feet of space, and has full accreditation by the Joint Commission on Accreditation of Healthcare Organizations. Hospital services include a 19-bed adult medical-surgical ward, an 18-bed pediatric ward, a 7-bed obstetric ward, 6 swing beds (Adult/OB), and the following outpatient departments: emergency room, dental department, eye clinic, pharmacy, lab, X-ray, and specialty clinics.

YKDRH service is based on a unique service plan called "Group Practice." Three wings of the hospital are dedicated to outpatient care, each serving a pre-set group of villages. All patients are seen according to the villages they are from in either Group Practice I, II, or III. Each patient is assigned a doctor, who will be the patient's physician for as long as the doctor is employed by YKDRH. The

## Yukon-Kuskokwim Delta Service Unit Outpatient Workload: FY 1959 - FY 2001



Source: Indian Health Service Inpatient/Outpatient Reporting System in Albuquerque, APC Report 1A, and some facilities are from local databases.

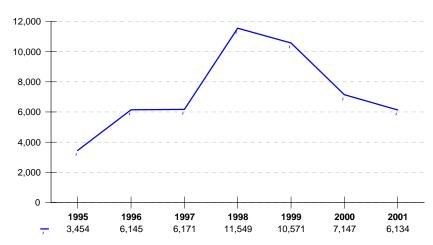
patient/doctor assignment system at YKDRH is utilized to ensure that the patient's health condition is being monitored by the same health care provider. Group practice seeks successfully eliminating long outpatient waiting periods. It also strives for reducing patients from being seen by a variety of doctors, which may create undue lack of knowledge of a patient's history.

## Yukon Kuskokwim Delta Service Area Leading Causes of Outpatient Visits: FY 2001 - FY 2002

All Age Groups	FY 2001	FY 2002
Tests Only	8,737	5,844
Hospital Medical/Surgical Follow-up	4,334	5,824
Accidents & Injuries	5,229	4,694
Hypertension	5,806	3,195
Infected Skin & Abrasions	3,566	3,135
Otitis Media	3,688	2,887
Refractive Error	3,293	2,645
Neuroses & Non-Psychotic Disorders	2,879	2,389
Bone & Joint Disorders	1,990	2,047
Pneumonia	2,093	1,954

Source: Indian Health Service Inpatient/Outpatient Reporting System, APC Report 1C.

## Aniak Subregional Health Clinic Outpatient Workload: FY 1995 - FY 2001



Source: Indian Health Service Inpatient/Outpatient Reporting System in Albuquerque, APC Report 1A, and some facilities are from local databases.

# Aniak Subregional Clinic Outpatient Diagnosis: FY 2001 - FY 2002

All Age Groups	FY 2001	FY 2002
Upper Respiratory Problems	523	421
Accidents & Injuries	465	410
Tests Only	448	368
Infected Skin & Abrasions	162	281
Otitis Media	283	219
Bone & Joint Disorders	113	176
Physical Examinations	130	168
Hospital Medical/Surgical Follow-up	124	166
Respiratory Allergies	125	116
Neuroses & Non-Psychotic Disorders	n/a	115
Urinary Tract Diseases	94	107

n/a=not available. Source: Indian Health Service Inpatient/Outpatient Reporting System, APC Report 1C.

**Clinical Services** consists of the following programs: *Dental, Dental Disease Prevention, Eye Care, Women, Infant, and Children (WIC), and HIV/AIDS Case Management.* 

**Sub-Regional Clinics** are planned to bring "hospital service" health care closer to the patient populations. A strategically situated sub-regional clinic would be built in a "hub" center surrounded by a cluster of villages. The Clara Morgan Clinic was built in Aniak and serves 16 Tribes and has been operational for over two years. The Pearl E. Johnson Clinic in Emmonak and the John Afcan Memorial Clinic in St. Mary's opened in the spring of 2001. Another sub-

# YUKON-KUSKOKWIM DFI TA SFRVICE AREA

regional is scheduled to open in Toksook Bay soon. Sub-Regional clinics have all the services of a hospital outpatient department (x-ray, dental, optometry, laboratory, urgent care, pharmacy, etc.), and are staffed by mid-level health care providers and community health aides.

**Community Services** includes the following village operations: *emergency medical services, health education* and *injury prevention program.* 

**Community Health Aide Services** has the following programs: *physician's assistant scholarship program* and *health aide/practitioner training*.

**Home Care Services** is a village based program that assists elders and chronically ill individuals with activities of daily living, respite care, chore services, personal care services, and home visits.

**Elder Activity** is a program developed to ensure that appropriate health care services are being provided to the elders in the region. Elders work with the Coordinator to identify services and activities that are desired.

**Community Mental Health Services** offers *Mental Health, Crisis Respite Center, Delta Supportive Living* and the *Residential Diagnostic Treatment Center.* 

The **Regional Substance Abuse Services** administer *Phillips Ayagnirvik, Chemical Misuse Treatment and Recovery Service, Regional Alcohol and Drug Abuse Prevention, Community Youth Advocate, Community Youth Aftercare Specialist, Bethel Alcohol Safety Action Program, Community Holistic Development and the Fetal Alcohol Syndrome/Fetal Alcohol Effect Prevention Program.* 

The **McCann Treatment Center**, located in Bethel, is a 16-bed residential treatment facility for adolescents between the ages of 10 and 17. The Tundra Swan residential treatment program at the McCann Center is the only program in the country that specializes in treating inhalant abuse.

The **Tribal and Program Support Services** administer *Tribal Unity and Medicine Gathering*, Office of Environmental Health and Engineering, Remote Maintenance Worker Program, Research & Planning/Grant Writing Resource Center, Medicaid and Medicare Enrollment and Media Services.

Community Health Aide/Practitioner. The Hospital supports the largest field health care program in Alaska. Presently, 165 Community Health Aide/Practitioners (CHA/P's) who work in 48 village-built clinics make up the YKHC health care delivery system. CHA/P's work and consult with the hospital physician staff via telephone when consultation is necessary. Complex health care cases are referred to mid-level practitioners or physicians. Recent program developments have included the introduction of modern telecommunications equipment that enhance the quality and efficiency of CHAP patient services.

### The following villages have community health aides:

Akiachuk	Chuathbaluk	Lower Kalskag	Marshall	Nunapitchuk	Scammon Bay
Akiak	Crooked Creek	Kasigluk	Mekoryuk	Oscarville	Shageluk
Alakanuk	Eek	Kipnuk	Mt. Village	Pilot Station	Sleetmute
Aniak	Emmonak	Kotlik	Napakiak	Pitka's Point	Stony River
Anvik	Grayling	Kongiganak	Napaskiak	Quinhagak	Toksook Bay
Atmauthluak	Holy Cross	Kwethluk	Newtok	Red Devil	Tuluksak
Chefornak	Hooper Bay	Kwigillingok	Nightmute	Russian Mission	Tuntutuliak
Chevak	Kalskag	Lime Village	Nunam Iqua*	St. Mary's	Tununak

<sup>\*</sup>Formerly Sheldon's Point

# NON-TRIBAL HEALTH AGENCIES AND FACILITIES AND TYPES OF SERVICES PROVIDED TO SERVICE POPULATION

Many federal and state agencies operate out of Bethel: the U.S. Fish & Wildlife Service, Federal Aviation Administration, U.S. Postal Service, National Weather Service, U.S. Department of Agriculture, Alaska Department of Fish and Game, Alaska Department of Corrections, District Attorney's Office, Alaska State Troopers, Alaska National Guard, Alaska Department of Community and Regional Affairs and a variety of other public service offices.

Some of the Native regional, non-profit organizations servicing Y-K D include: the Association of Village Council Presidents, Orutsararmiut Native Council, Kuskokwim Native Association, Association of Village Council Presidents Regional Housing Authority, Kuigpagmiut Inc. Other places of employment consist of private retail shops, banks, seasonal construction, commercial fishing and fish-processing firms.

The Native regional non-profit organizations servicing the Y-K-D include the Association of Village Council Presidents and the YKHC. Other places of employment consist of private retail shops, banks, seasonal construction, commercial fishing and fish-processing firms.

# HEALTH STATUS OF ALASKA NATIVES LIVING IN THE YUKON-KUSKOKWIM DELTA SERVICE AREA

Indicators of the health status of the Y-K D population reflect high infant mortality, premature death in adolescents and young adults due to injuries (both intentional and unintentional), pervasive chemical misuse, and a high prevalence of infectious and respiratory diseases. Although much progress has been made to improve the health status of Y-K D residents through various interventions, the population continues to suffer some of the highest morbidity and mortality rates in the United States.

Mortality. The following table displays the three-year average crude rates for the Y-K D Service Area.

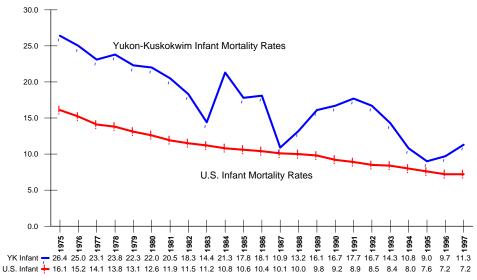
## Yukon-Kuskokwim Delta Service Area

Alaska Native Deaths by Three-Year Average Crude Death Rates per 100,000 Population

	Leading Causes of Death	1994-1996 /4	1995-1997 /4	1996-1998 /4
1)	Malignant Neoplasms /1	106.3	113.4	111.4
	Lung Cancer	30.4	37.8	37.1
2)	Unintentional Injuries (Accidents) /2	106.3	88.8	79.1
	Water Transport/Drowning	35.4	29.6	30.7
	Motor Vehicles	16.9	11.5	12.9
3)	Heart Disease	84.4	69	74.2
4)	Suicide	54.0	54.2	66.2
5)	Chronic Obst. Pul. Diseases	20.3	16.4	22.6
6)	Cerebrovascular	27.0	26.3	22.6
7)	Alcohol Related /3	35.4	27.9	21
8)	Pneumonia & Influenza	13.5	14.8	16.1
9)	Congenital Anomalies	8.4	13.1	9.7
10)	Diseases of Early Infancy	6.8	8.2	8.1

### Infant Mortality Rates.

#### **Infant Mortality Rates** Yukon Kuskokwim Delta Service Area vs. U.S. 1975 - 1997



Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02. U.S. rates are from the NCHS.

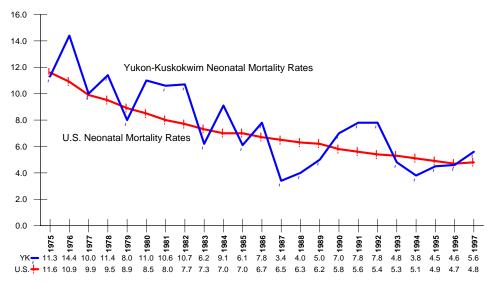
<sup>1/</sup> Lung Cancer is included in Malignant Neoplasms.
2/ Does not include injuries purposefully inflicted or injuries undetermined whether purposefully or accidentally inflicted. Motor Vehicle and Water Transport/Drowning are also counted in the total Accidents; it does not include alcohol related deaths. 3/ Alcohol Related deaths include alcoholic psychoses, alcohol dependence syndrome, alcohol abuse, alcoholic liver disease and cirrhosis, alcoholic polyneuropathy, alcoholic cardiomyopathy, alcoholic gastritis, excessive blood level of alcohol, and accidental poisoning by alcoholic beverages and ethyl alcohol.

<sup>4/</sup> Causes not included when deaths average less than one per year in 1995-97.

Alaska Area Native Health Service, Division of Planning, Evaluation & Health Statistics.

Neonatal Mortality Rates. The neonatal period is defined as less than 28 days of age.

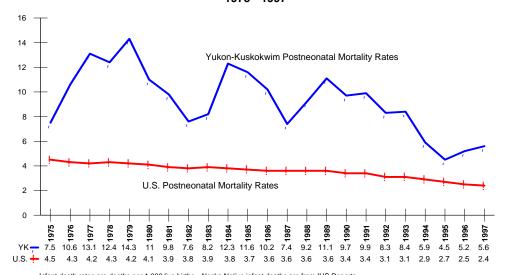
Neonatal Mortality Rates Yukon Kuskokwim Delta Service Area vs. U.S. 1975 - 1997



Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02. U.S. rates are from the NCHS.

Postneonatal Mortality Rates. The postneonatal period is defined as 28 to 365 days of age.

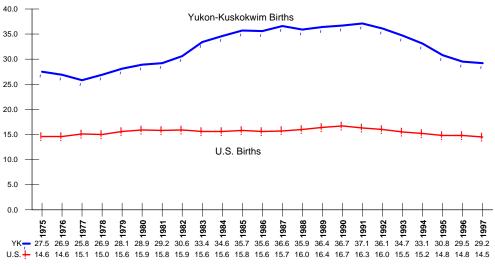
Postneonatal Mortality Rates Yukon Kuskokwim Delta Service Area vs. U.S. 1975 - 1997



Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02. U.S. rates are from the NCHS.

**Birth Rates.** The 1997 infant birth rate for the Yukon-Kuskokwim Delta Service Area, at 29.2 per 1,000 Native population, is more than twice that of the U.S. rate.

Birth Rates Yukon Kuskokwim Delta Service Area vs. U.S. 1975 - 1997



Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01. The three year average is the end year of the three year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

**Alcohol Related Injuries.** Alcohol-related deaths include alcoholic psychosis, alcohol dependence syndrome, alcohol abuse, alcoholic liver disease and cirrhosis, alcoholic polyneurophathy, alcoholic cardiomyopathy, alcoholic gastritis, excessive blood level of alcohol, and accidental poisoning by alcoholic beverages and ethyl alcohol.

Even though alcohol morbidity is reflected most typically in injury prevalence, the cause of death coding does not measure alcohol related injuries. Physicians at the hospital have observed (information obtained from The Calista Region: "A Gentle People, A Harsh Life," February 1989) that:

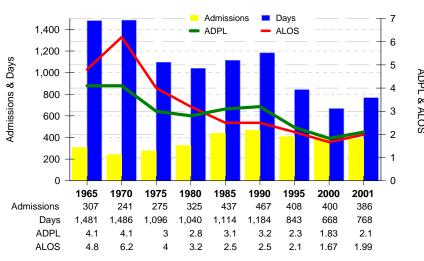
- Eighty to ninety percent of all injury cases are alcohol-related;
- Two-thirds of all major frostbite cases are alcohol-related;
- Many children's injuries are caused by alcohol-related parental unawareness or neglect;
- Fetal alcohol syndrome is seen on a regular basis in babies born to mothers who are village residents.

Alcohol use is also a factor in the high rates of domestic violence, sexual assaults, and child abuse. These have been widely reported in the Anchorage Daily News series, "A People in Peril" and The AFN Report on the Status of Alaska Natives: *A Call for Action*, 1998. The statistics gathered by the Division of Family and Youth Services and the Tundra Women's Coalition indicate high numbers of intakes and crisis intervention-most of them alcohol-related. In Bethel, the police department estimates that 90% of the arrests are also alcohol-related.

## **INPATIENT WORKLOAD**

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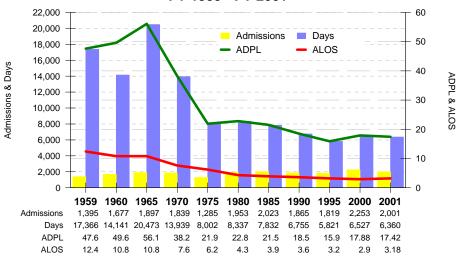




ADPL = Average Daily Patient Load; ALOS = Average Length of Stay SOURCE: HSA=202 Monthly Report of Inpatient Services

The inpatient workload excluding newborns for the Yukon-Kuskokwim Delta Regional Hospital is displayed in the following graph.

### Yukon-Kuskokwim Delta Regional Hospital Inpatient Workload Excluding Newborns FY 1959 - FY 2001



ADPL = Average Daily Patient Load; ALOS = Average Length of Stay SOURCE: HSA=202 Monthly Report of Inpatient Services

## **DISCHARGE WORKLOAD**

## Yukon Kuskokwim Delta Service Area Leading Causes of Discharges: FY 2001 - FY 2002

	FY 2001	FY 2002
Deliveries (Childbirth)	325	223
Pneumonia	274	193
Infected Skin & Abrasions	221	161
Complications of Pregnancy	111	115
Bronchitis, Emphysema	149	105
Accidents & Injuries	98	75
Asthma	0	52
Urinary Tract Diseases	46	42
Nutritional & Metabolic Disorders	58	37
Heart Disease	44	31
Cerebrovascular Diseases	30	28

Source: Indian Health Service Inpatient/Outpatient Reporting System, Direct Inpatient Report 2C.